

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An arc tube for a discharge bulb in which both ends of a light emitting tube inserting electrodes respectively are sealed and a closed space having the electrodes opposed to each other and filled with a light emitting substance with a rare gas for starting is provided in the light emitting tube,

wherein the light emitting tube comprises translucent ceramics formed substantially cylindrically and has a ratio d/L of an outside diameter d to a whole length L ranging from 0.2 to 0.5, further

wherein said both ends of the light emitting tube are sealed by molybdenum pipes in which the electrodes are fixed and held respectively,

wherein each of said electrodes is formed by integrating a tungsten line and a molybdenum line with an end of said tungsten line opposed to an end of said molybdenum line;
and

wherein said molybdenum line is welded to one of said molybdenum pipes.

2. (original): The arc tube for a discharge bulb according to claim 1, wherein the light emitting tube has a thickness of 0.25 mm to 1.2 mm.

3. (currently amended): An arc tube for a discharge bulb in which both ends of a light emitting tube inserting electrodes respectively are sealed and a closed space having the electrodes opposed to each other and filled with a light emitting substance together with a rare gas for starting is provided in the light emitting tube,

wherein the light emitting tube comprises translucent ceramics formed substantially cylindrically and has a parallel ray transmittance of 20% or less and a whole ray transmittance of 85% or more, ~~further~~

wherein said both ends of the light emitting tube are sealed by molybdenum pipes in which the electrodes are fixed and held respectively,

wherein each of said electrodes is formed by integrating a tungsten line and a molybdenum line with an end of said tungsten line opposed to an end of said molybdenum line;
and

wherein said molybdenum line is welded to one of said molybdenum pipes.

4. (currently amended): An arc tube for a discharge bulb comprising a light emitting tube formed using translucent ceramics and having a ratio d/L of an outside diameter d to a whole length L ranging from about 0.2 to about 0.5,

wherein both ends of the light emitting tubes have electrodes inserted therein, ~~and~~

-wherein said ends are sealed by molybdenum pipes in which the electrodes are fixed and held respectively,

wherein each of said electrodes is formed by integrating a tungsten line and a molybdenum line with an end of said tungsten line opposed to an end of said molybdenum line;
and

wherein said molybdenum line is welded to one of said molybdenum pipes.

5. (original): The arc tube for a discharge bulb according to claim 4, wherein the light emitting tube has a substantially cylindrical shape.

6. (currently amended): An arc tube for a discharge bulb comprising a light emitting tube, formed in a substantially cylindrical shape using translucent ceramics and having a parallel ray transmittance of 20% or less and a whole ray transmittance of 85% or more,

wherein both ends of the light emitting tubes have electrodes inserted therein, and

wherein said ends are sealed by molybdenum pipes in which the electrodes are fixed and held respectively,

wherein each of said electrodes is formed by integrating a tungsten line and a molybdenum line with an end of said tungsten line opposed to an end of said molybdenum line;
and

wherein said molybdenum line is welded to one of said molybdenum pipes.

7. (new): The arc tube for a discharge bulb according to claim 1, wherein said outside diameter d ranges from 2.0 mm to 4.0 mm, and
wherein said whole length L ranges from 6.0 mm to 14.0 mm.